

# Remedial Action Report of Findings

**Fernbridge Market  
Fernbridge, California  
Case No. 12345**

Prepared for:

**Lindsay Investments**



**Consulting Engineers & Geologists, Inc.**

---

**812 W. Wabash  
Eureka, CA 95501-2138  
707/441-8855**

**February 2005  
098076**



**CONSULTING ENGINEERS & GEOLOGISTS, INC.**

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Reference: 098076

February 25, 2005

Mr. Mark Verhey  
Humboldt County Division of Environmental Health  
100 H Street, Suite 100  
Eureka, CA 95501

**Subject: Remedial Action Report of Findings, Fernbridge Market, 623 Fernbridge Drive, Fernbridge, California; Site No. 12345**

Dear Mr. Verhey:

The attached report presents the activities and results from the remedial action conducted at the Fernbridge Market, located at 623 Fernbridge Drive, in Fernbridge, California. Work was conducted at the site to remove contaminant-impacted soil associated with underground storage tanks formerly located at the site. SHN Consulting Engineers & Geologists, Inc. completed this work on behalf of Lindsay Investments.

If you have any questions regarding the work completed, please call me at 707/441-8855.

Sincerely,

**SHN Consulting Engineers & Geologists, Inc.**

A handwritten signature in black ink that reads 'Pat Barsanti'. The signature is written in a cursive, flowing style.

Pat Barsanti  
Project Manager

PNB/EJN:lms:med  
Enclosure: RA Report

copy w/encl: Lindsay Investments

Reference: 098076

# **Remedial Action Report of Findings**

**Fernbridge Market  
Fernbridge, California  
Case No.12345**

Prepared for:

**Lindsay Investments**

Prepared by:



**Consulting Engineers & Geologists, Inc.  
812 W. Wabash Ave.  
Eureka, CA 95501-2138  
707-441-8855**

**February 2005**

QA/QC: PNB\_\_\_\_\_

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## Acronyms & Abbreviations

<	Denotes a value that is “less than” the method reporting limit.
mg/kg	milligrams per kilogram
ug/g	micrograms per gram
1, 2-DCA	1, 2-Dichloroethane
BGS	Below Ground Surface
BTEX	Benzene, Toluene, Ethylbenzene, and total Xylenes
CAP	Corrective Action Plan
DCO <sub>2</sub>	Dissolved Carbon Dioxide
DO	Dissolved Oxygen
EPA	United States Environmental Protection Agency
HCDEH	Humboldt County Division of Environmental Health
MTBE	Methyl-Tert Butyl Ether
MW-#	Monitoring Well-#
ORP	Oxidation-Reduction Potential
OVA	Organic Vapor Analyzer
RA	Remedial Action
RAP	Remedial Action Work Plan
ROF	Report of Findings
SHN	SHN Consulting Engineers & Geologists, Inc.
TBA	Tertiary Butyl Alcohol
TPHG	Total Petroleum Hydrocarbon as Gasoline
USA	Underground Service Alert
UST	Underground Storage Tank

## 1.0 Introduction

Presented herein is the Report of Findings (ROF) for the Remedial Action (RA) conducted at Fernbridge Market, located at 623 Fernbridge Drive in Fernbridge, California (Figure 1). Work was conducted at the site to remove contaminant-impacted soil associated with Underground Storage Tanks (USTs) formerly located at the site. SHN Consulting Engineers & Geologists, Inc. (SHN) completed this work on behalf of Lindsay Investments. All activities were conducted in accordance with the approved July 17, 2003, *Remedial Action Plan, Fernbridge Market, Fernbridge, California*.

This report discusses the activities and results for the site RA that includes; the excavation and disposal of contaminant-impacted soil; the collection and analysis of soil samples from the excavation area; backfilling and compaction of the excavation area; and site restoration. In addition, a brief summary of the site history including the nature and distribution of contamination identified at the site is included in this report. A detailed site history and a comprehensive evaluation of site contamination are presented in and Remedial Action Plan (RAP) prepared for the site (SHN, July 2003).

### 1.1 Site History

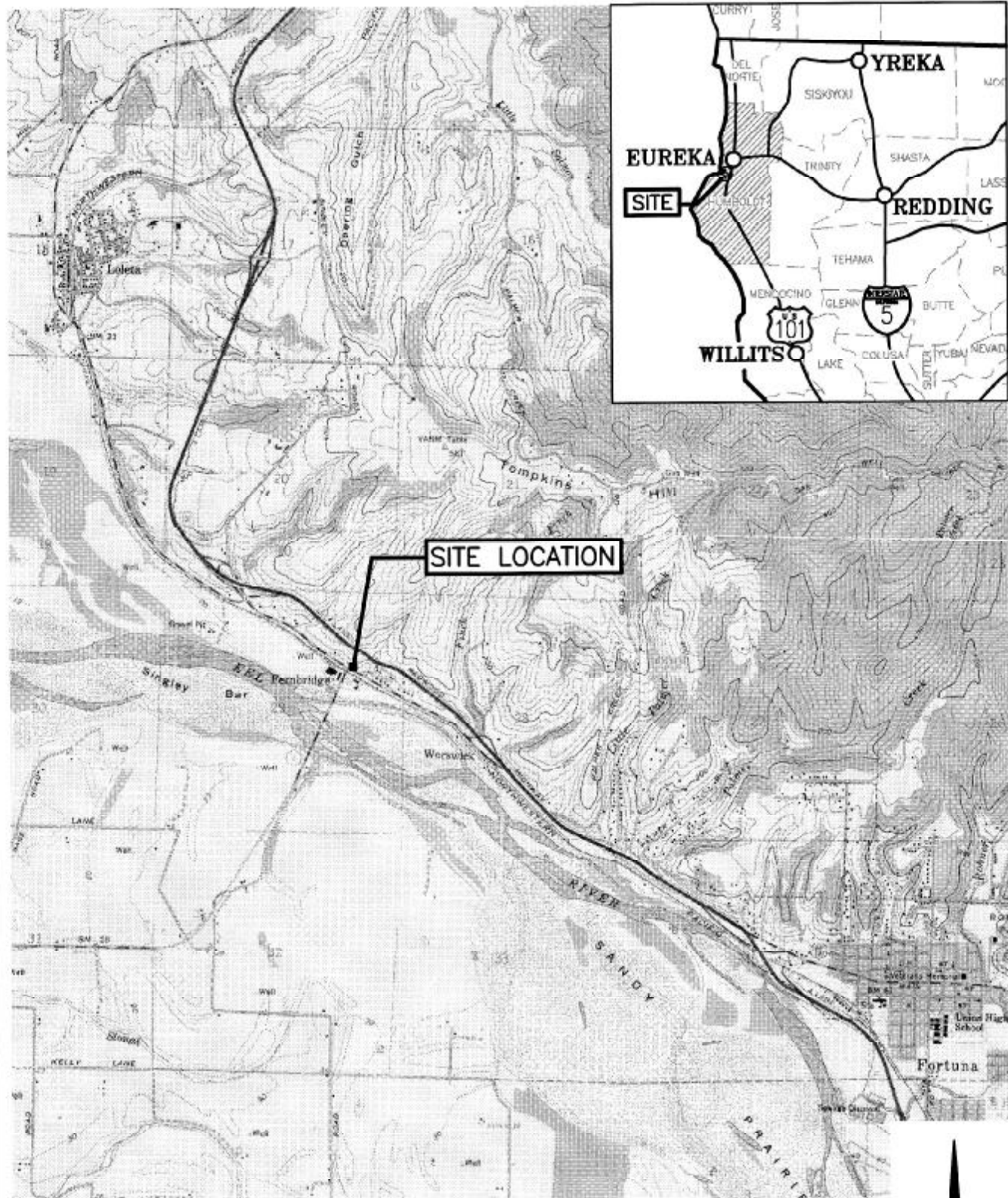
The site is located along Fernbridge Drive and is currently occupied by a market and restaurant, which consists of one building and a paved parking lot (Figure 2). Two 650-gallon USTs were formerly located at the site for the retail sale of gasoline. The period of operation for the USTs was believed to be during the 1940s and 1950s. Beacom Construction removed the USTs from the site on March 13, 1996. The former locations of the USTs and the existing site utilities (storm drains, sanitary sewer, water, electricity, and gas) are shown on Figure 2.

During the removal of the USTs, an odor and visible evidence of petroleum contaminants was observed in the tank excavation pit. Based upon the field observations made by the Humboldt County Division of Environmental Health (HCDEH) and soil sample laboratory analytical results, an Unauthorized Release Report was filed. Subsequent soil and groundwater investigations were conducted at the site and four groundwater monitoring wells were installed on May 16 and 17, 2000. Quarterly groundwater monitoring has occurred at the site since June 2000. A complete summary of soil and groundwater analytical results collected from the Fernbridge Market site was presented in the site Corrective Action Plan (CAP) (SHN, April 2003) and RAP (SHN, July 2003).

### 1.2 Nature and Extent of Contamination

The nature of the soil and groundwater contamination at the site consists of Total Petroleum Hydrocarbons as Gasoline (TPHG), Benzene, Toluene, Ethylbenzene, and total Xylenes (BTEX), and fuel oxygenates Methyl Tertiary-Butyl Ether (MTBE), Tertiary-Butyl Alcohol (TBA), and 1, 2-Dichloroethane (1, 2-DCA).

The existing pattern of soil and groundwater contamination in the vicinity of the former tank area suggests that contamination had migrated in a southerly and westerly direction (across the parking lot and toward Fernbridge Drive). The lateral extent of soil contamination on site appears to have been defined; however, a high variability in soil concentrations existed. The variability in soil concentrations appeared to be associated with preferential pathways. The vertical extent of the petroleum hydrocarbon contamination in soil throughout the site was relatively shallow, with the



SOURCE: FORTUNA AND FIELDS  
LANDING USGS 7.5 MINUTE QUADRANGLES

1"=3000'±

**SH**  
Consulting Engineers  
& Geologists, Inc.

Fernbridge Market  
UST Investigation  
Fernbridge, California

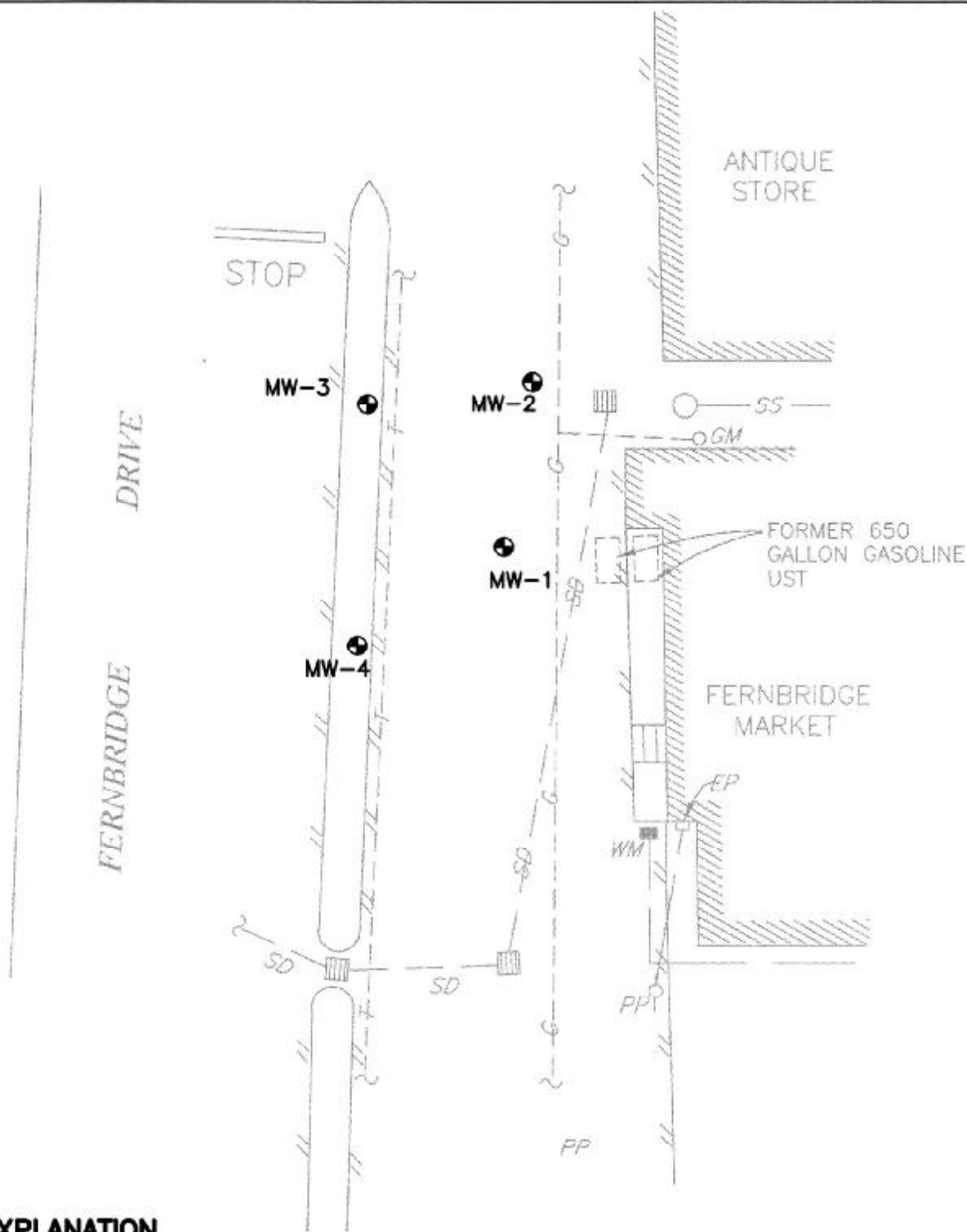
Site Location Map

SHN 098076

February, 2005

098076-location

Figure 1



# **EXPLANATION**

MW-1 MONITORING WELL LOCATION  
 AND DESIGNATION





highest concentrations detected between 6 and 8 feet Below Ground Surface (BGS). Contamination had not been detected at depths above 5 feet BGS or below 9 feet BGS (SHN, April 2003). A summary of historic soil sample analytical results within the planned excavation area of the site is presented in Figure 3.

The site is underlain by unconsolidated alluvial deposits consisting predominantly of silts and clays. Depth to groundwater at the site varies from approximately 5 to 7 feet BGS. Groundwater flow at the site is typically to the southwest.

### **1.3 Remedial Action Objective**

The objective of the RA was to remediate soil at the site to the extent that it would no longer be a threat to groundwater. The reduction of hydrocarbon concentrations within and downgradient of the source area was achieved through excavation. The proposed cleanup goals for soil at the site during this remedial action were 100 milligrams per kilogram (mg/kg) for TPHG, 1.0 mg/kg for benzene, and 13 mg/kg for MTBE.

## **2.0 Scope of Work**

The scope of work discussed in this section was designed to provide the information needed to meet the objective of this RA. Activities conducted during the site RA included the following activities:

- Project implementation, including agency coordination, permit acquisition, and subcontractor coordination
- Abandonment of two monitoring wells located within the proposed excavation area
- Site set up and the removal of surface structures
- Excavation of contaminant-impacted soil
- Collection of excavation confirmation soil samples for laboratory analysis
- Characterization and disposal of contaminant-impacted soil
- Backfilling and compaction of the excavation area, and site restoration
- Installation of monitoring well(s)
- Preparation of this report of findings

### **2.1 Project Implementation**

SHN and Beacom Construction set up and coordinated all activities related to the project, including obtaining all necessary permits and corresponding with the HCDEH and the Humboldt County Public Works Department. Underground Service Alert (USA) was notified prior to the commencement of field activities. All work was conducted in general accordance with the approved work plan and the Community Health and Safety Plan prepared for the site.

### **2.2 Field Program**

Approximately 621 tons of contaminant-impacted material was excavated from the Fernbridge Market site and disposed of at an appropriate off-site facility. Soil samples were collected from the



excavation sidewalls and floor for chemical analysis to confirm that established soil remediation goals for the site were achieved. The excavation area was then backfilled and compacted and the site was restored to previous site conditions.

Two site monitoring wells located within the planned excavation area were abandoned prior to commencement of excavation activities on October 16, 2004 (MW-1 and MW-4, Figure 3). The monitoring wells were over drilled using a hollow stem auger drill rig and backfilled to the surface with cement. The HCDEH requested the installation of a replacement monitoring well following the completion of site excavation activities. Monitoring well MW-5 was installed at the site on February 9, 2005, and is discussed further Section 5.0.

### **2.2.1 Site Setup and Equipment Mobilization**

Prior to the implementation of the excavation work, staging and temporary stockpiling areas were established at the site and temporary fencing was installed around the perimeter of the planned excavation area. The area designated for soil stockpiling was lined with Visqueen® and bermed around the edges. Two 1,000-gallon water storage tanks were mobilized to the site to contain water removed during excavation dewatering.

Equipment mobilized to the site for the duration of the RA included a backhoe, dump truck, loader and assorted hand tools. Equipment used onsite during the RA for specific purposes included a double drum roller, soil compactor, asphalt paver, curb extruder, and compaction testing equipment.

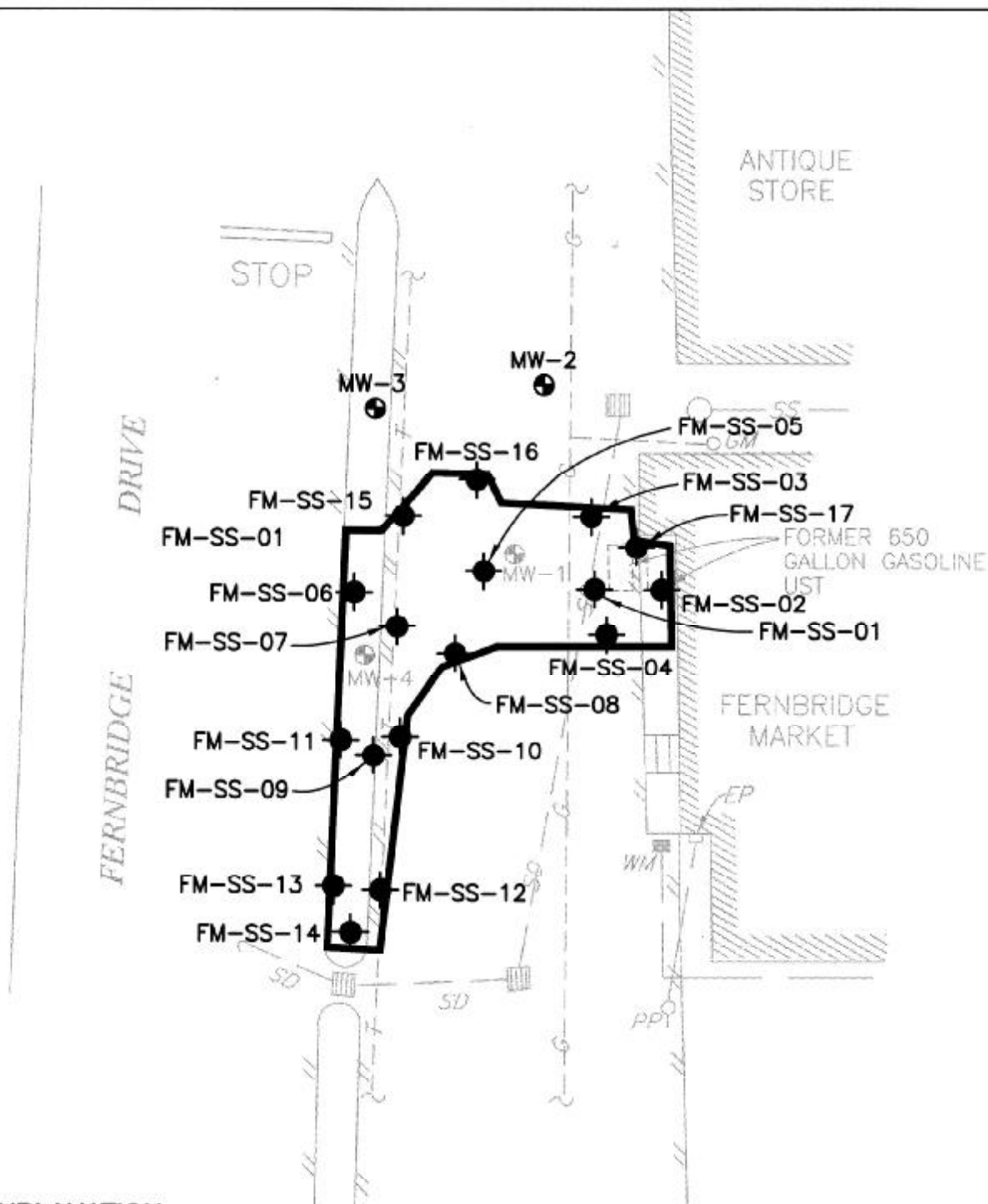
A portion of the deck located in front of the Market required removal in order to access the intended area of excavation. The decking material was preserved during removal and was reused during site restoration. Large boulders located along Fernbridge drive were temporarily removed from the work area to provide access to the excavation area.

Site constraints encountered during the RA included:

- The site is an operating facility.
- Buildings and surface structures are located near the source area and plume.
- Underground utilities are located near the source area and plume.
- Public right-of-way (Fernbridge Drive).

### **2.2.2 Excavation Activities**

Approximately 621 tons of contaminant-impacted material was removed from the excavation area during the period of December 14 to December 16, 2004. The volume and area of the excavation was predetermined based on presence of soil contamination identified from previous site investigations (SHN, April 2003). Excavation activities started at the location of the former USTs and proceeded south towards Fernbridge Drive in order to remove only the areas that are necessary (Figure 4). The excavation depths ranged from approximately 9 to 10 feet BGS. Representatives from the HCDEH were onsite periodically during site excavation activities.



### EXPLANATION

- MW-2 MONITORING WELL LOCATION AND DESIGNATION
- FM-SS-12 SOIL SAMPLE LOCATION AND DESIGNATION
- EXCAVATION AREA
- MW-1 FORMER SITE MONITORING WELL



A backhoe operated by Beacom Construction was used to remove contaminant-impacted material from the excavation area and direct load the material into a dump truck. The dump truck transported the material from the excavation area to the stockpile area for temporary storage. The material was eventually loaded onto trucks for transportation to the appropriate off-site facility.

Field data collected during the excavation process was used to assess when the excavation was complete and should be sampled for confirmation purposes. Information used in the decision making process included visual observations by SHN, the use of an Organic Vapor Analyzer (OVA). The results of laboratory analysis from the collection of confirmation soil samples determined when the final excavation limits were attained. Daily Field Reports and OVA Field Monitoring Sheets are contained in Appendix A.

### **2.2.3 Excavation Soil Sample Collection**

Soil samples were collected for laboratory analysis from the excavation sidewalls and floor in order to confirm soil remaining in place was below site remediation goals. Confirmation soil samples were collected from the excavation area at a frequency of every 20 linear feet on the sidewalls and for approximately every 400 square feet of surface area on the excavation floor. Soil samples collected from the excavation sidewalls were acquired from approximately 2 feet above the excavation floor (approximately 7 to 8 feet BGS). Figure 4 shows the locations of 17 soil samples collected from the excavation area during remediation activities at the site (FM-SS-01 through FM-SS-17). The results of confirmation soil sample analysis are presented in Section 3.1.

Soil samples were collected from the excavation area with the assistance of the backhoe, placed in laboratory-supplied containers and stored in an iced cooler. The samples were transported under chain-of-custody documentation to a State of California certified analytical laboratory for chemical analysis. Soil samples were analyzed for constituents discussed in Section 2.2.4.

### **2.2.4 Laboratory Analysis**

Confirmation soil samples collected from the excavation area were analyzed for:

- TPHG, BTEX, and MTBE in general accordance with Environmental Protection Agency (EPA) Method 8260B.

North Coast Laboratories, Ltd., a state certified analytical laboratory located in Arcata, California, completed the sample analysis.

### **2.2.5 Soil Disposal**

Soil generated during the excavation program was temporarily stored in a Visqueen® envelope on site in a pre-designated area. The soil was pre characterized for disposal according to the acceptance criteria for Bio Industries, Inc. located in Red Bluff, California.

The excavated material was loaded into trucks during the period of December 15 to December 20, 2004, for transport and disposal. Ben's Trucking of Red Bluff, California transported approximately 621 tons of excavated material to Bio Industries in Red Bluff, California. The disposal profile and shipping receipts are contained in Appendix B.

### 2.2.6 Site Restoration

Upon completion of the excavation and soil sampling activities, the area was backfilled with gravel to approximately 3 feet BGS. The remaining excavation area was backfilled with aggregate base material and compacted to 95% maximum wet density with a double-drum roller. Compaction testing was conducted on December 16 and 17, 2004, according to Caltrans C231 procedures in the field. The Compaction field test results are contained in Appendix A.

Following backfilling and compaction activities, the area was repaved with asphalt, and the curb along Fernbridge Drive was replaced to match pre-existing site conditions. Boulders removed from the shoulder of Fernbridge Drive prior to the RA were placed back into position, and the decking removed from the front of the market was restored. Groundwater was not encountered during site excavation activities, and therefore no site dewatering occurred.

## 3.0 Remedial Action Results

The native soil encountered during the RA consisted primarily of fine-grained material (silts and clay). The material excavated from the area formerly occupied by the USTs contained gravel, and appeared to be significantly impacted by petroleum constituents based on soil discoloration and elevated OVA readings. During excavation activities, the amount of contamination was observed to diminish with distance from the former UST locations in all directions except to the south (downgradient).

As excavation continued in the southerly direction, two abandoned gravel-filled leach lines were encountered within the area of identified contamination. The leach lines ran parallel to Fernbridge Drive and were connected to vertical metal wells that extended to approximately 7 feet BGS. The gravel filled leach lines contained evidence of petroleum contamination and were removed from the site. Evidence of soil contamination was fairly distinct in odor and discoloration around the leach lines. The contamination appeared to be fairly localized around the areas of high estimated permeability and did not appear to extend more than 2 feet from this material into the fine-grained native soil.

### 3.1 Excavation Soil Sample Results

The analytical results of soil samples collected from the excavation area were used to confirm that RA cleanup goals were attained and that excavation activities should stop. The results from excavation soil samples collected during the site RA are presented in Table 1, and the sample locations are shown in Figure 4.

TPHG and BTEX were detected in soil samples collected from the excavation sidewalls at sample locations FM-SS-02, -06, and -08. Components of BTEX were additionally detected in the excavation area at sample locations FM-SS-01, -03, -04, -05, -10, -11, -12, and -13. The levels of TPHG detected in excavation soil samples ranged from below laboratory reporting limits (<1.0 ug/g) to 43 micrograms per gram (ug/g). The levels of benzene detected in excavation soil samples ranged from below laboratory reporting limits (<0.005 ug/g) to 0.43 ug/g.

TPHG and BTEX levels that remain in place on the excavation floor and sidewalls were all below the designated soil remediation goals established for the site. MTBE was not detected above the laboratory method laboratory reporting limits in any of the excavation soil samples collected. The analytical test results, chain-of-custody documentation, and laboratory quality control data are included in Appendix C.

<p align="center"><b>Table 1</b>  <b>Excavation Soil Sample Analytical Results, December 2004</b>  <b>Fernbridge Market, Fernbridge, California</b>  <b>(in ug/g)<sup>1</sup></b></p>							
<b>Sample Number</b>	<b>Sample Location</b>	<b>TPHG<sup>2</sup></b>	<b>Benzene<sup>3</sup></b>	<b>Toluene<sup>3</sup></b>	<b>Ethyl-Benzene<sup>3</sup></b>	<b>Total Xylenes<sup>3</sup></b>	<b>MTBE<sup>4</sup></b>
FM-SS-01	Floor	<1.0	0.21	<0.005	<0.005	<0.015	<0.025
FM-SS-02	Sidewall	10	0.038	0.0083	0.14	0.1786	<0.025
FM-SS-03	Sidewall	<1.0	0.11	<0.005	0.033	0.040	<0.025
FM-SS-04	Sidewall	<1.0	0.073	<0.005	0.022	0.0052	<0.025
FM-SS-05	Floor	<1.0	0.14	<0.005	<0.005	<0.015	<0.025
FM-SS-06	Sidewall	43	0.24	0.60	0.54	1.85	<0.025
FM-SS-07	Floor	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
FM-SS-08	Sidewall	2.2	0.43	0.016	0.047	0.052	<0.025
FM-SS-09	Floor	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
FM-SS-10	Sidewall	<1.0	0.011	<0.005	<0.005	<0.015	<0.025
FM-SS-11	Sidewall	<1.0	0.0055	<0.005	<0.005	<0.015	<0.025
FM-SS-12	Sidewall	<1.0	0.021	<0.005	0.0073	<0.015	<0.025
FM-SS-13	Sidewall	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
FM-SS-14	Floor	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
FM-SS-15	Sidewall	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
FM-SS-16	Sidewall	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
FM-SS-17	Sidewall	<1.0	<0.005	<0.005	<0.005	<0.015	<0.025
<p>1. ug/g: micrograms per gram  2. TPHG: Total Petroleum Hydrocarbons as Gasoline, analyzed in general accordance with EPA Method No. 8260B  3. BTEX: Benzene, Toluene, Ethylbenzene and Total Xylenes, analyzed in general accordance with EPA Method No. 8260.  4. MTBE: Methyl Tertiary-Butyl Ether, analyzed in general accordance with EPA Method No. 8260B.  5. &lt;: Denotes a value that is "less than" the method reporting limit.</p>							

## 4.0 Discussion of Results

The removal of contaminant-impacted soil from the former location of the USTs and downgradient, and the assessment of soil contamination remaining at the site was successfully completed during the RA. The results of excavation soil samples and observations made in the field indicate that the areas containing elevated levels of petroleum constituents were removed and only minor areas of TPHG and BTEX contamination remain in the smear zone (approximately 5 to 8 feet BGS). MTBE was not detected at the site.



## 5.0 Long-Term Strategy

The installation of groundwater monitoring well MW-5 was completed at the site on February 9, 2005, and is shown in Figure 5. This well is intended to replace the former site monitoring wells MW-1 and MW-4 (destroyed prior to the commencement of the RA). In discussions with representatives from the HCDEH during site excavation activities, the installation of one monitoring well in this area was deemed sufficient to assess groundwater conditions due to the nature of the backfill material (pea gravel). Monitoring well MW-5 consists of a 1-inch diameter pre-packed well assembly, and is screened from a depth of 5 to 15 feet below ground surface.

The groundwater monitoring points at the site (MW-2, MW-3, and MW-5) will monitor the effects of the remediation, and document the ability of the aquifer to naturally attenuate any residual dissolved phase petroleum hydrocarbons. It is anticipated the groundwater monitoring will continue on the site for one additional year following the completion of this remedial action.

Groundwater samples collected from the site during quarterly monitoring will be analyzed for the following constituents:

- TPHG, BTEX, and MTBE in general accordance with EPA Method No. 8260B.

Monitored natural attenuation of groundwater at the site will be part of the long-term strategy and will be demonstrated over time with the following lines of evidence:

- Documented loss of contaminants over time, including the proof of decreased concentrations in target contaminants by in-plume monitoring wells over at least one hydraulic cycle and/or a demonstration that the groundwater contaminant plume is stable or shrinking.
- Physical/Geochemical evidence of contaminant degradation by monitoring key intrinsic biodegradation parameters, including Dissolved Oxygen (DO), Dissolved Carbon Dioxide (DCO<sub>2</sub>), Oxidation-Reduction Potential (ORP), nitrate, sulfate, ferrous iron, manganese, and methane.

Groundwater samples from each monitoring well location at the site are proposed to be analyzed for biodegradation: nitrate, sulfate, dissolved iron, dissolved manganese, dissolved methane, and alkalinity. Groundwater will also be monitored for DO, DCO<sub>2</sub>, and ORP using portable instrumentation during the field sampling activities. These parameters will provide additional support to indicate that natural attenuation of petroleum hydrocarbons is occurring at the site.

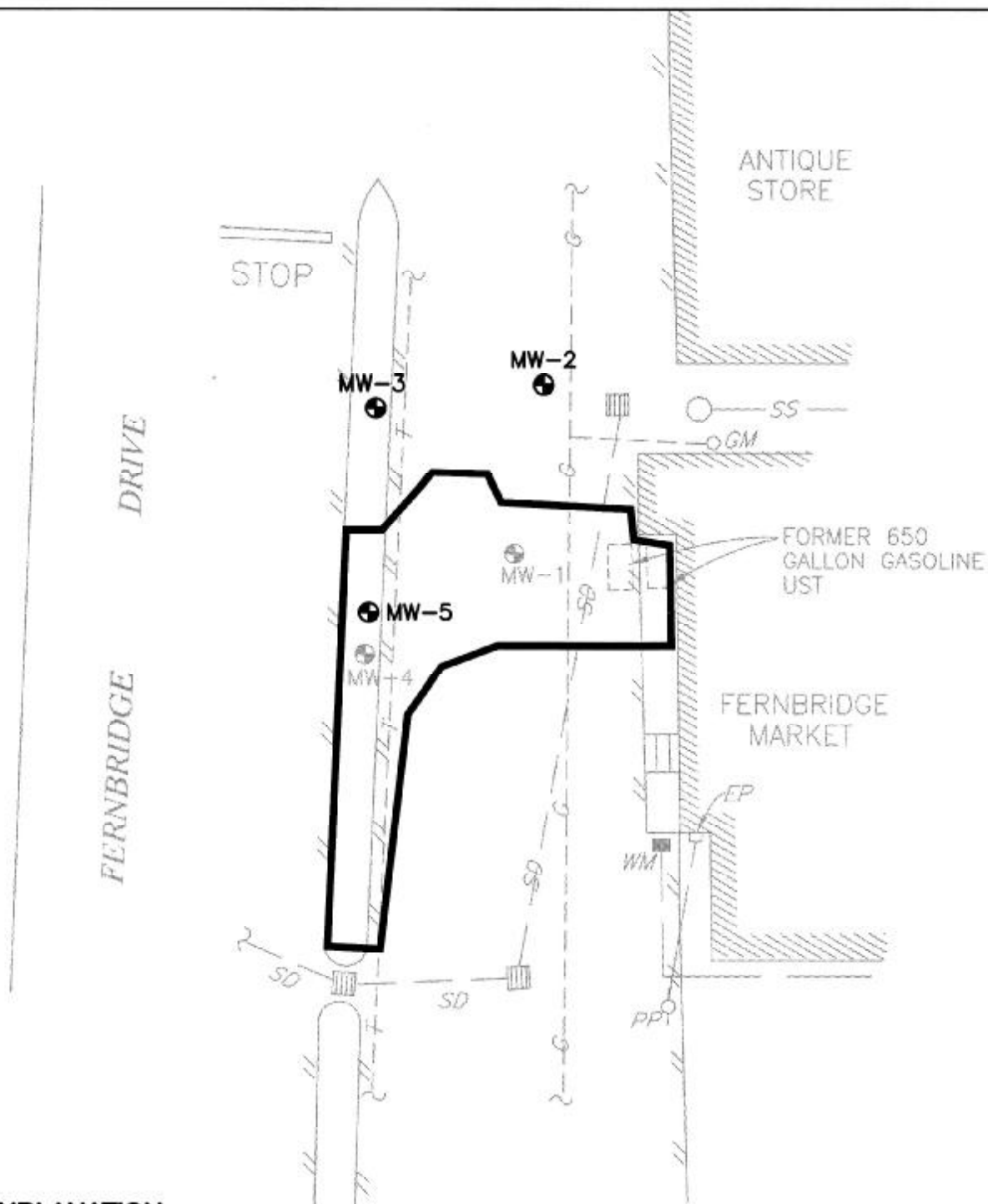
The first post-site remediation groundwater monitoring event is scheduled for March 2005.

## 6.0 References




SHN Consulting Engineers & Geologists, Inc. (April 2003). *Corrective Action Plan, Fernbridge Market, Fernbridge, California*. Eureka: SHN.

---. (July 2003). *Remedial Action Plan, Fernbridge Market, Fernbridge, California*. Eureka: SHN.





### EXPLANATION

- MW-2  MONITORING WELL LOCATION AND DESIGNATION
-  EXCAVATION AREA
- MW-1  FORMER SITE MONITORING WELL







# CONSULTING ENGINEERS & GEOLOGISTS, INC.

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## DAILY FIELD REPORT

Job No.: 048026

Date: 12/13/04

Project Name <b>Fernbridge MKT.</b>	Client/Owner <b>LINDSAY INV.</b>	DFR Sequence No.: <b>1 of</b>
General Location Of Work <b>683 Fernbridge Dr. Fernbridge</b>	Owner/Client Representative <b>Dick Lindsay</b>	Day Of Week: <b>Mon</b>
General Contractor <b>SHN</b>	Contractors Onsite <b>Beacon Const.</b>	Project Engineer <b>PNB</b>
Type Of Work <b>RA, setup,</b>	Weather <b>overcast</b>	Supervisor <b>ESN</b>
		Technician

900 PMP gear, current site  
930 @ PM, met w/ Beacon - Dana Morrison  
Kara, Charles, Dick Lindsay  
OPS Review, EPC Outline, Contact  
Market Personnel, Kelly, Connie,  
1000 Start Deck removal, Rock Removal  
1030 Discuss NPS inc. Fence, Virginia  
Barricades, Parking, Traffic Control  
1040 offsite, Summary SHN  
1100 @ SHN, update PNB  
1330 Current site,  
1400 w/ Beacon, site fencing up, barricades  
rocks & deck removal, Backhoe & Loader  
1445 mob. 2 1,000-gal water tanks to site  
1500 offsite, Summary SHN  
1520 @ SHN, calendar year, PMP for 12/14  
1545 End Day

4.25 hrs  
58 m/s

Signature and Date

*Eric Nish*

12/13/04

Copy given to:

Reported By:



CONSULTING ENGINEERS & GEOLOGISTS, INC.  
 812 W. Wabash • Eureka, CA 95501-2138 • 707-441-8855 • Fax 707-441-8877 • info@shn-eureka.com

## DAILY FIELD REPORT

Job No.: 098076

Date: 12/14/04

Project Name <b>Fernbridge mkt</b>	Client/Owner <b>Lindsay Inv.</b>	DFR Sequence No.: <b>2 f</b>
General Location Of Work <b>623 Fernbridge Dr. Fernbridge</b>	Owner/Client Representative <b>Dick Lindsay</b>	Day Of Week: <b>Tue</b>
General Contractor <b>SHN</b>	Contractors Onsite <b>Beacom Const.</b>	Project Engineer <b>PNB</b>
Type Of Work <b>IRA, ECL</b>	Weather <b>Fog</b>	Supervisor <b>EJN</b>
		Technician

800 prep gear, outside FM

820 @ FM, Beacom onsite, start

Asphalt Removal, 10cy DT curbs

Dump material @ stockpile loc. FT+E

Visgroom in stockpile are set-up.

925 Exc, Heavy Shim 2 HC color @ 4.5-7.5'

located to HEK zone, w/ FE staining

diminishing w/dist.

1015 collect floor sample SS-01, ~9.0'

cont cur to Fernbridge main

1115 collect SW samples, 02(NSW) 03(BSW) 04(SSW)

1200 offsite, execute SHN, @ SHN col prep, clamp PD

1230 collect WCL for sample pick-up.

have 1 cooler up front - U samples

1300 Gravel site, cont exc towards FD,

1330 Pothole @ Area-4 10' south, slight HC

odor + staining, collect TF-2 sample

1430 HC DEH curbed (MV), ops Review

1500 Don Harris's onsite, Drop Rev at BMS

schedule 8 trucks from BMS due 12/15

1530 2D old syphon line: Pothole at FT, 6" x 6"

1615 offsite outside SHN

1655 @ offsite, place cooler w/ sample in tech office

doc control,

1700 end day

8.5 hrs

59 mls

Sample Log

Loc	ID	Time
9.0	TF 1	FM-SS-01 1038
	NSW	FM-SS-02 1120
	BSW	FM-SS-03 1136
	SSW	FM-SS-04 1140
	TF 2	FM-SS-05 1400

Equip. Costs

Backhoe

DD Roller

Loader

10 cu DT

Signature and Date

Copy given to:

Reported By:

**CONSULTING ENGINEERS & GEOLOGISTS, INC.**

812 W. Wabash • Eureka, CA 95501-2138 • 707/441-8855 • FAX: 707/441-8877 • shninfo@shn-engr.com

**FIELD MONITORING SHEET**

PROJECT	<i>Fernbridge Mkt.</i>	DATE:	<i>12-14-04</i>
JOB NO	<i>098076</i>	NAME:	<i>ESN</i>
CLIENT:	<i>Lindsay Inv.</i>	INSTRUMENT:	<i>580 PID - TNO</i>
LOCATION:	<i>Excavation Area</i>	WEATHER:	<i>overcast</i>
TIME OF READING	BACKGROUND	READING ppm	COMMENTS
<i>915</i>	<i>0.5 - 1.5</i>		<i>Bk / Parking Lot</i>
<i>920</i>		<i>10 - 15</i>	<i>Exc Area</i>
			<i>- Not sustained</i>
<i>930</i>		<i>30 - 60</i>	<i>Spills</i>
<i>1000</i>		<i>5 - 10</i>	<i>Op. Work Area</i>
			<i>- Not sustained</i>
<i>1035</i>		<i>1.5 - 3.0</i>	<i>SS - 01</i>
		<i>40 - 50</i>	<i>Spills</i>
<i>1120</i>		<i>6 - 10</i>	<i>SS - 02</i>
<i>1136</i>		<i>1 - 2</i>	<i>SS - 03</i>
<i>1140</i>			<i>SS - 04</i>
<i>1320</i>	<i>1 - 1.5</i>		
<i>1340</i>		<i>3 - 4</i>	<i>MW-4 (~6.5')</i>
<i>1400</i>		<i>10 - 15</i>	<i>Spills</i>



# CONSULTING ENGINEERS & GEOLOGISTS, INC.

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## DAILY FIELD REPORT

Job No.: 048076

Date: 12-15-04

DFR Sequence No.: 2 of 5

Day Of Week: Wed.

Project Name

Fernbridge Market

Client/Owner

Lindsay Inv.

General Location Of Work

623 Fernbridge Dr. Fernbridge

Owner/Client Representative

Dick Lindsay

Project Engineer

PNB

General Contractor

SHN

Contractors Onsite

Beccon

Supervisor

SHN

Type Of Work

BA, SCL, Digs, Sampling

Weather

Clear

Technician

745 @ SHN, Prep gear, locate SCL

815 @ FM w/ Beccon, Exc. cont. along FD  
Vertical Siphon Tank Found.

845 collect Exc. samples, one bag SW/TK-2  
Beccon trucking onsite, load trucks w/ soil

1000 SCL onsite, plane line curve disrupted

1015 stop work, Assist exposing plane line

1030 move Bunker to N, side by road, excavate

w/ SHN in road, collect SW sample

1100 Pulver @ 3' end for plane line

P&E onsite, Test Re Gas Line, wrap when

line is accessible prior to BF,

portal Alan Garrison 445-5568

1130 sample + COC prep, Enroute SHN

1200 1 cooler sent NCL, 4 samples

1215 final contact HC, (UV), Re Siphon line

1250 Enroute FM,

1215 @ site, cont. FD trench exc.

1300 collect Exc. samples

1340 stop Exc. along FD, sidewall unstable

order backfill for immediate delivery

1400 collect Exc. samples

1530 start Backfilling Exc, Re Gravel

1630 BF upto 4' along FD,

1645 Enroute SHN,

1715 @ SHN, COC & sample prep, Ops Rev w/ RR

sample Delivery sched for 12/16

1745 End Dig

Sample Log

Loc	ID	Time
FDSW-1	FM-SS-06	850
TF-3	FM-SS-07	900
SSW-2	FM-SS-08	1030
TF-4	FM-SS-09	1310
SSW-3	FM-SS-10	1320
FDSW-2	FM-SS-11	1330
SSW-4	FM-SS-12	1405
FDSW-3	FM-SS-13	1415
TF-5	FM-SS-14	1425
NSW-3	FM-SS-15	1500
NSW-2	FM-SS-16	1510

Equip - B11, Loader, 10 cu.

BENS

8 trucks  
shipped  
w/ soil

9.5 hrs  
58 mls

Signature and Date

Sub Vth

Copy given to:

Reported By:





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## FIELD MONITORING SHEET

PROJECT	<u>Fernbridge Mkt</u>	DATE:	<u>12-15-04</u>
JOB NO	<u>098076</u>	NAME:	<u>EJN</u>
CLIENT:	<u>Lindsay Inv.</u>	INSTRUMENT:	<u>PID - 580 / TNU</u>
LOCATION:	<u>Excavation Area</u>	WEATHER:	<u>Clear</u>

TIME OF READING	BACKGROUND	READING ppm	COMMENTS
845	1.0 - 1.5		Parking Lot
846	1.5 - 2.5	1.5 - 2.5	Work Area
852		25 - 40	Shin w/HG sample
			SS-D6
905		10 - 12	TF SS-07
930		1.0 - 2.0	Op. Work Space
1005		2.5 - 5.0	Shined Soil - 7P
1035		3.0 - 6.0	SW - SS-08
1100		1.8 - 3.2	Phone Line trench
1315	BL 1-2		
1320		20 - 30	Spills
		2 - 4.0	TF SS-09
		1 - 3.0	SW SS-10
		2.5 - 3.5	SW SS-11
1400		6.5 - 11.0	Spills
		1.5 - 4.0	SW SS-12
1415		1.8 - 2.5	SW SS-13
		1.0 - 2.0	TF SS-14
1500		4.2 - 5.5	Spills
		0.5 - 2.0	NSW - SS-15
		1.5 - 2.5	NSW SS-16



# CONSULTING ENGINEERS & GEOLOGISTS, INC.

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DAILY FIELD REPORT		Job No. 098076
		Page 1 of 2
Project Name FERNBRIDGE MKT	Client/Owner	Daily Field Report Sequence No 4 of 5
General Location Of Work FERNBRIDGE	Owner/Client Representative	Date 12-16-04
General Contractor BETCOM	Grading Contractor	Day Of Week THURS
Type Of Work SOIL EX	Grading Contractor, Superintendent, Or Foreman	Project Engineer PAT BARSANTI
Source & Description Of Fill Material P&A GRAVEL	Weather CLEAR COOL	Supervisor R. RUZZI
		Technician
		Key Persons Contacted (Civil Engr, Architect, Developer, Etc)
Describe Equipment Used For Hauling, Spreading, Watering, Conditioning, & Compacting		
<p>8:00 ON-SITE - HANCOM SAWCUTTING -          REMOVE ~ 1 BUCKET FROM CORNER - CORRECT SAMPLER          5-17 FROM S.S. BGS - 22 RPM          8:15 CALL PG&amp;E ALLAN GARRISON? 445-5568 - GAVE MESSAGE          CALL PG&amp;E MAIN LINE 1-800 743 5000          623 FERNBRIDGE          8:20, 8:50 CALL PG&amp;E MAIN LINE SAID TODAY CAN'T GIVE TIME          8:50 CALL ALLAN GARRISON AGAIN SAID HE DID NOT KNOW          ABOUT LINE WRAPPING - WILL HAVE SOMEONE DO IT TODAY          8:55 BACKFILLING W/ P&amp;A GRAVEL          9:15 REPAIR DRAIN LINE &amp; CLAY PIPE NEAR BUDG          4 BENS TRUCKS LOADED SO FAR TODAY          - FILL W/ BASE ALONG PHONE LINE          10:15 3 MORE BENS TRUCKS - DAVID MORRIS SAID 8 TRUCKS          SUPPOSED TO SHOW TODAY - RICHARD MORRIS SAID          REMOVE CHIP ON LINE          10:30 PG&amp;E ON SITE          10:42 PG&amp;E WRAPPED GAS LINE OFFSITE - CONTINUE TO          BACKFILL 1 MORE BENS TRUCK - 6 SO FAR          11:5 OFFSITE          8- BENS TRUCKS TOTAL          11:5 OFFSITE</p>		
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## DAILY FIELD REPORT

Job No.: 098076

Date: 12-16-04

DFR Sequence No.: 4 of 5

Day Of Week: Thurs

Project Engineer  
PNBSupervisor  
EJN

Technician

Project Name

Fernbridge MKL

Client/Owner

Lindsay Inv.

General Location Of Work

623 Fernbridge Dr, Fernbridge

Owner/Client Representative

Dick Lindsay

General Contractor

SHN

Contractors Onsite

Beacom, Bens

Type Of Work

Sampling, BF, comp, shipping

Weather

Overcast, Clear(P.M)

1230 Call For MEL sample pickup @ SHN

1245 Eureka Site

1310 @ Site, Ops Rev. w/ Beacom

cont BF, start A/B BF w/compaction

1345 Shipping (Bens) Ends - 8 Trucks

1400 set phone cable, Gas &amp; SD Good

cover sewer line, HC Not comp

1430 Contact SHN materials testing Re comp test

No curve on file for Granite-Aken material

will send tech for test &amp; sample for curve

1530 SHN onsite, comp test, Data Due 12/17

cont, BF compaction,

1615 Ops Rev w/ Beacom Re comp results

Contact MT Lab Re curve - HC right of way

use calltrans curve method

1625 offsite, eureka SHN

1645 @ SHN, MT Lab, Data is good + 95% achieved

1700 Notify Beacom of comp test results, OK to

cont. BF &amp; Comp. - schedule 10 AM 12/17

test for comp.

1715 Doc Control

1730 End Day

5 hrs

58 mls

Bens,  
8 trucks shipped

Signature and Date

EJN

12/16/04

Copy given to:

Reported By:



# ENGINEERS & GEOLOGISTS

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Eureka, CA 95501-2138

Tel: 707 / 441-8855  
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JOB Fernbridge Mkt.

SHEET NO. 098076

OF 1

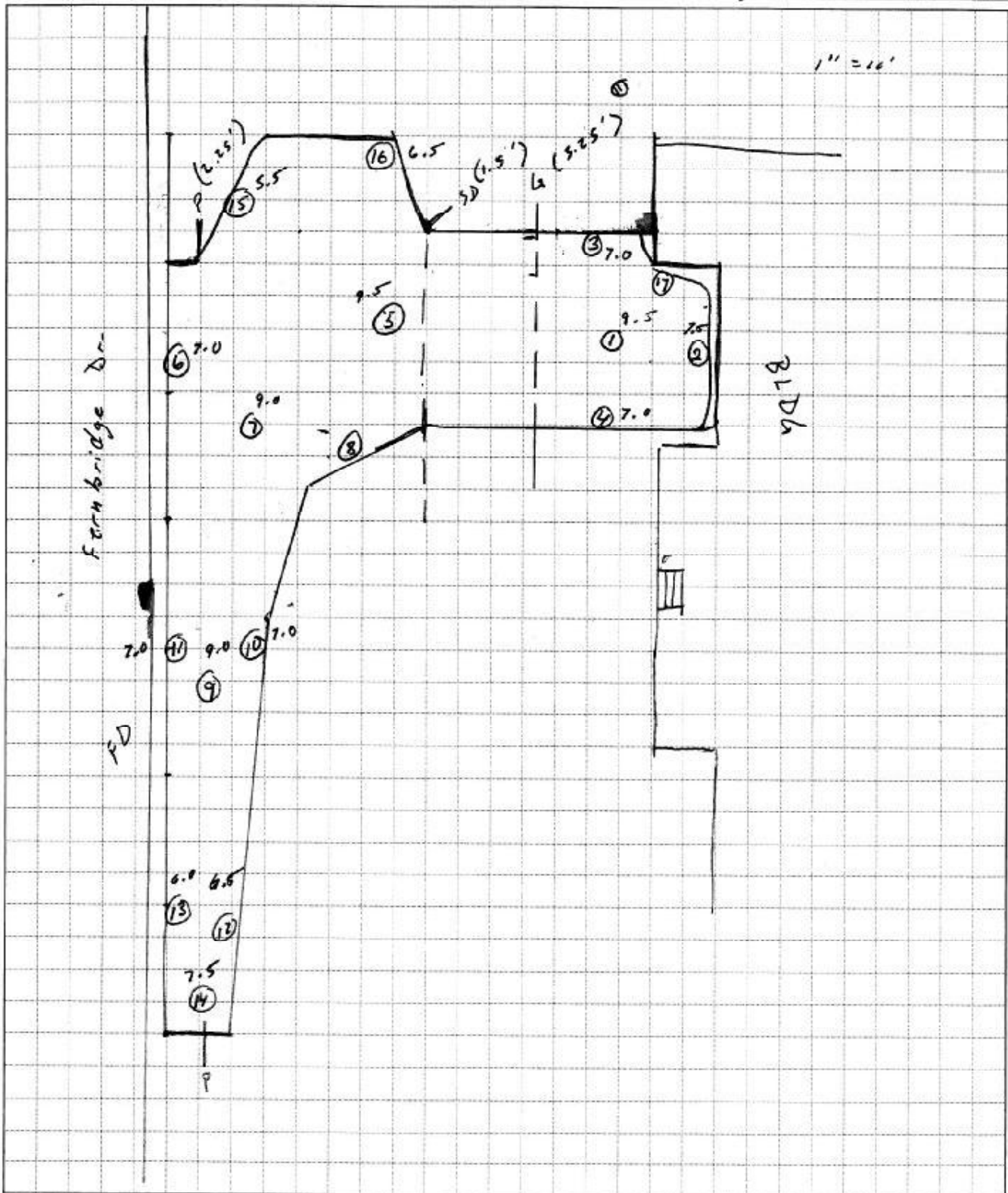
CALCULATED BY SPN

DATE 12/16/04

CHECKED BY \_\_\_\_\_

DATE \_\_\_\_\_

SCALE 1" = 10'





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## DAILY FIELD REPORT

Job No.: 098076

Date: 12-17-04

Project Name

Fernbridge Mkt.

Client/Owner

Lindsay Inv.

DFR Sequence No.: 5 of 5

Day Of Week: FRI

General Location Of Work

623 Fernbridge Dr., Fernbridge

Owner/Client Representative

Dick Lindsay

Project Engineer

PNB

General Contractor

SHN

Contractors Onsite

Beacom Const, Bens Trucking

Supervisor

EJN

Type Of Work

RA, Site Rest, ship,

Weather

clear

Technician

1000 Enroute FM site

1020 @ Site, BE & Comp cont., Shipping underway  
SHN compaction testing onsite (dt)

1100 Remove Broken Asphalt From Edges  
prepare for paving

1115 Incorporate Drum containing w/2 material  
to soil stockpile across street

1200 Shipping (Bens) complete - 8 trucks  
App. 1 load remains - (12/20 ship)

1245 RA Area prepared for paving,  
Rev. Site Rest w/ km, Rocks, Decks, Curb

1305 Paving equip. onsite

Signature and Date

Copy given to:

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## DAILY FIELD REPORT

Job No.: 098076

Date: 2/9/05

DFR Sequence No.: 1 of 1

Day Of Week: Wed.

Project Name

Fernbridge Mkt.

Client/Owner

Lindsay Investments

General Location Of Work

623 Fernbridge Dr, Fernbridge

Owner/Client Representative

Dick Lindsay

General Contractor

SHN

Contractors Onsite

Fisch Env.

Project Engineer

PNB

Supervisor

EJN

Type Of Work

Well Installation

Weather

clear

Technician

800 @ SHN, prep gear, meet Fisch

820 Enroute site,

840 @ site w/ Fisch, site prep, TSM  
Noting Market occupants

850 set up @ MW-5, assemble well  
3/4" ID, PM pack system

915 start drilling MW-5

940 stop drilling, TD @ 15'

Start well casing, WD 14.8'

1000 install well bore, Bore 1.5-3.0

casing seal 1.5 to 0.0

1030 installation complete

cleanup + debris

1050 offsite FM, Enroute SHN

1115 @ SHN, calibrate gear, doc control

1130 End Day

3.5 hrs

63769

783

Signature and Date

SA TWH

2/9/05

Copy given to:

Reported By:





**BIO INDUSTRIES**  
Phone (530) 527-5040 Fax (530) 527-9170  
**GENERATORS MATERIALS PROFILE SHEET**

**TYPE OR PRINT IN INK**Profile Sheet Code T-1048-04**A. GENERAL INFORMATION:**Date: 1/19/05Generator's Name: Richard LindsayMailing Address: P.O. Box 914, Ferndale, CA 95536Phone: 707-725-5174 Fax: \_\_\_\_\_Site Address: 623 Fernbridge Dr.  
Fernbridge, CASite History: Market w/ UST for the retail sale of gasoline.  
operated for undetermined period prior to 1980Description of Material and Generating Process (Please be specific): Soil generated from  
the excavation activities during Removal ActionIs Source of Waste from a Underground Tank? (Check one) Yes ☒ No ☐Petroleum Product Present (check all that apply): ☒ Gasoline ☐ Diesel ☐ Waste Oil

Other: \_\_\_\_\_

**B. MAIL INVOICES TO:**Company Name: Beacom Construction Contact Person: David MorrisAddress: 659 Main St., Fortuna, CA 95540Phone: 707-725-3323 Fax: 707-725-5428**C. CONSULTANT:**Company: SHN Consulting Contact Person: Erik NielsenAddress: 812 W Wabash, Eureka CA 95501Phone: 707-441-8855 Fax: 707-441-8877**D. REPRESENTATIVE SAMPLE CERTIFICATION:**Is the representative sample collected to prepare this profile and laboratory analysis, collected in accordance with U.S. EPA § 40 CFR 261.20(c) guidelines or equivalent rules? (Check one) YES ☐ NO ☐Sample Date: \_\_\_\_\_ Check One: Composite Sample ☐ Grab Sample ☐

Sampler's Employer: \_\_\_\_\_

Sampler's Signature: \_\_\_\_\_ Printed Name: \_\_\_\_\_

**E. TRANSPORTATION INFORMATION:**

Anticipated Quantity (tons): \_\_\_\_\_

Provide Directions, including any maps available as to the location of soils/wastes to be transported:

Method of Transportation:

Bulk ☒

Drums \_\_\_\_\_

**F. CHEMICAL CHARACTERISTICS:**

Hydrocarbon Concentration, please list range of concentration:

TPH-G ND - 3200 P.P.M TPH-D \_\_\_\_\_ Motor Oil \_\_\_\_\_Hydraulic Oil \_\_\_\_\_ Benzene ND - 18 P.P.M Other \_\_\_\_\_

TTLT Metals (mg/Kg), please list range of concentration:

Antimony \_\_\_\_\_ Cobalt \_\_\_\_\_ Selenium \_\_\_\_\_

Arsenic \_\_\_\_\_ Copper \_\_\_\_\_ Silver \_\_\_\_\_

Barium \_\_\_\_\_ Lead 6.78 - 13.7 P.P.M Thallium \_\_\_\_\_

Beryllium \_\_\_\_\_ Mercury \_\_\_\_\_ Vanadium \_\_\_\_\_

Cadmium \_\_\_\_\_ Nickel \_\_\_\_\_ Zinc \_\_\_\_\_

Chromium \_\_\_\_\_ Molybdenum \_\_\_\_\_

Aquatic Toxicity ☐ Pass ☐ Fail**G. PRE-ACCEPTANCE REQUIREMENTS:**

GASOLINE ANALYSIS REQUIRED, please mark tests performed and number of samples:

NO. OF SAMPLES	CHEMICAL ANALYSIS	EPA METHOD
6	Total Petroleum Hydrocarbons (TPH) Gas *	8015 M/5030
6	Benzene, Toluene, Xylene, Ethylbenzene (BTEX)	8260 B
6	Fuel Oxygenates **	8260 B
6	Total Lead *** (if leaded gasoline is suspected or if source is from spill on a roadway) NOTE: Only 1 analysis required on sample containing highest TPH Gas concentration.	7421

\* If test show TPH greater than 3,000 mg/KG as gasoline, one bioassay test, in accordance with Title 22, must be performed on samples that exceed this level (a maximum of 2 test will be required, but they must be performed on the most highly contaminated soil samples.)

\*\* Methyl tert-Butyl Ether, Tert-Butanol, Di-isopropyl Ether, Ethyl tert-Butyl Ether, & Tert-Amyl methyl Ether.

\*\*\* If total lead concentration exceeds 50 mg/kg, the sample must be analyzed for soluble lead using the California Waste Extraction Test.

**DIESEL ANALYSIS REQUIRED**, please mark test performed and number of samples:

NO. OF SAMPLES	CHEMICAL ANALYSIS	EPA METHOD
	Total Petroleum Hydrocarbons (TPH) Diesel * (Jet Fuel, kerosene, and similar formulations shall be tested by EPA Method 8015M)	8015 M/3550

- \* If test show TPH greater than 10,000 mg/KG as diesel, one bioassay test, in accordance with Title 22, must be performed on samples which exceed this level (a maximum of 2 test will be required, but they must be performed on the most highly contaminated soil samples.)

**MOTOR OIL ANALYSIS REQUIRED**, please mark tests performed and number of samples:

NO. OF SAMPLES	CHEMICAL ANALYSIS	EPA METHOD
	Total Petroleum Hydrocarbons (TPH) Gas *	8015 M/5030
	Total Petroleum Hydrocarbons (TPH) Diesel *	8015 M/3550 B
	Oil and Grease-Extractable*	5520 D/E
	BTEX	8260 B
	Fuel Oxygenates **	8260 B
	Semi-Volatile organics	8270 C
	Polychlorinated Biphenyls	8082
	Total Metals for compounds listed in Table II, Section 66261.24 of Title 22(Excluding asbestos, lead and mercury)***	6010 A/B
	Lead ***	7421
	Mercury ***	7471 A

- \* If test show TPH greater than 3,000 mg/kg as gasoline, 6,000 mg/kg as oil & grease, or 10,000 mg/kg as diesel one bioassay test, in accordance with Title 22, must be performed on the most highly contaminated soil samples.

- \*\* Fuel oxygenates shall include the constituents identified under gasoline contaminated soil.

- \*\*\* If any total metal concentration exceeds 10 times the Soluble Threshold Limit Concentration for the respective metal listed in Table II, Section 66261.24 of Title 22, then a soluble analysis for the metal(s) using the California Waste Extraction Test shall be required.

#### FOR ALL PETROLEUM CONTAMINATED SOILS

If the soil is from an agriculture facility such as a farm or ranch, or if pesticide use was confirmed or suspected at the source of the contaminated soil, analyses for Total Threshold Limit Concentrations of Organic Persistent and Bioaccumulative Toxic Substances as listed in Table III, Section 66261.24, Title 22, shall be required. The Regional Water Quality Control Board may require additional testing.

#### SAMPLE FREQUENCY

Less than 10 Cubic Yards	1	Sample
11 to 99 Cubic Yards	2	Samples
100 to 199 Cubic Yards	3	Samples
200 to 499 Cubic Yards	4	Samples
500 to 2,500 Cubic Yards	6	Samples
For each 500 yards greater than 2,500	1	Additional Sample



**H. CERTIFICATION:**

No soils referenced herein may be delivered until the foregoing certificate is received and approved by Bio Industries, and BIO assigns a profile number and delivery date. If any soils delivered to BTE are found to be "hazardous waste" pursuant to federal or state regulations, Client shall be solely responsible for their removal. If Client fails to so remove such soils, Bio Industries, acting as Client's agent, may arrange for such removal at Client's expense.

This is a complete and accurate description of the soil referenced herein; no deliberate or willful omissions have been made and all known or suspected hazards have been disclosed herein. I/We certify that the soil is not "hazardous" as defined by U.S. Department of Transportation (DOT), U.S. Environmental Protection Agency (EPA), State or local regulations. I/We further Certify that the soils referenced herein contain no free liquids. All required analysis reports are attached.

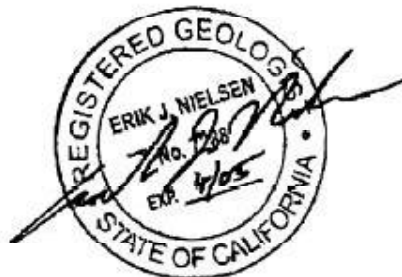
**OWNER/GENERATOR CERTIFICATION:**

Signature: Erik Nielsen Title: Site Supervisor  
Name (print): Erik Nielsen Date: 1/19/05

**PROFESSIONAL CERTIFICATION:**

Signature: \_\_\_\_\_ Title: \_\_\_\_\_  
Name (print): \_\_\_\_\_ Date: \_\_\_\_\_

Registration Stamp:



**BIO INDUSTRIES, INC.**

19760 Callahan Road Red Bluff, CA

P.O. Box 732, Red Bluff, CA 96080 - 530/527-5040 - Fax 530/527-9170

**WEIGHMASTER CERTIFICATE:**

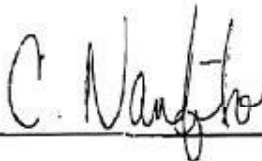
THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on the certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 3 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

GENERATOR: Fernbridge Market  
623 Fernbridge Drive  
COMMODITY: Contaminated Soil

DATE: 12/15/2004  
JOB: T-1048-04

	CARRIER NAME	TRUCK NO	TRAILER NO	GROSS LBS	TARE LBS	NET LBS	NET TONS
1	Ben's	22	23E	78920	32660	46260	23.13
2	Ben's	43	22E	81720	32200	49520	24.76
3	Ben's	33	24E	79080	32580	46500	23.25
4	Ben's	32	25E	82400	32960	49440	24.72
5	Ben's	34	44P	78960	30280	48680	24.34
6	Ben's	48	48P	86220	31380	54840	27.42
7	Ben's	21	21P	82800	28800	54000	27.00
8	Ben's	38	26E	78960	31900	47060	23.53
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
Tonnage Total						198.15	

WEIGHMASTER:



BEACON TRUCK &amp; EQUIPMENT, INC.

**BIO INDUSTRIES, INC.**

19760 Callahan Road Red Bluff, CA

P.O. Box 732, Red Bluff, CA 96080 - 530/527-5040 - Fax 530/527-9170

**WEIGHMASTER CERTIFICATE:**

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on the certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

GENERATOR: Fernbridge Market  
623 Fernbridge Drive  
COMMODITY: Contaminated Soil

DATE: 12/17/2004  
JOB: T-1048-04

	CARRIER NAME	TRUCK NO	TRAILER NO	GROSS LBS	TARE LBS	NET LBS	NET TONS
1	Ben's	22	23E	82500	32560	49940	24.97
2	Ben's	43	22E	79120	32220	46900	23.45
3	Ben's	33	24E	79580	32480	47100	23.55
4	Ben's	38	26E	80080	32760	47320	23.66
5	Ben's	32	25E	79800	32960	46840	23.42
6	Ben's	34	44P	82260	30140	52120	26.06
7	Ben's	21	21P	84020	28820	55200	27.60
8	Ben's	48	48P	84060	31380	52680	26.34
9							
10							
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16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
Tonnage Total						199.05	

WEIGHMASTER:



**BIO INDUSTRIES, INC.**

19760 Callahan Road Red Bluff, CA

P.O. Box 732, Red Bluff, CA 96080 - 530/527-5040 - Fax 530/527-9170

**WEIGHMASTER CERTIFICATE:**

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on the certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 13700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

GENERATOR: Fernbridge Market  
623 Fernbridge Drive

DATE: 12/16/2004

JOB: T-1048-04

COMMODITY: Contaminated Soil

	CARRIER NAME	TRUCK NO	TRAILER NO	GROSS LBS	TARE LBS	NET LBS	NET TONS
1	Ben's	22	23E	80740	32700	48040	24.02
2	Ben's	43	22E	81080	32240	48840	24.42
3	Ben's	33	24E	79860	32460	47400	23.70
4	Ben's	38	26E	83640	32720	50920	25.46
5	Ben's	32	25E	82440	32920	49520	24.76
6	Ben's	24	44P	79860	30200	49660	24.83
7	Ben's	21	21P	84160	28720	55440	27.72
8	Ben's	48	48P	81760	31440	50320	25.16
9							
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20							
21							
22							
23							
24							
25							
Tonnage Total						200.07	

WEIGHMASTER:

C Nanfeto

**BIO INDUSTRIES, INC.**

19760 Callahan Road Red Bluff, CA

P.O. Box 732, Red Bluff, CA 96080 - 530/527-5040 - Fax 530/527-9170

**WEIGHMASTER CERTIFICATE:**

THIS IS TO CERTIFY that the following described commodity was weighed, measured or counted by a weighmaster, whose signature is on the certificate, who is a recognized authority of accuracy, as prescribed by Chapter 7 (commencing with Section 12700) of Division 5 of the California Business and Professions Code, administered by the Division of Measurement Standards of the California Department of Food and Agriculture.

GENERATOR: Fernbridge Market  
623 Fernbridge Drive

DATE: 12/20/2004

JOB: T-1048-04

COMMODITY: Contaminated Soil

	CARRIER NAME	TRUCK NO	TRAILER NO	GROSS LBS	TARE LBS	NET LBS	NET TONS
1	Ben's	22	23E	81060	32760	48300	24.15
2							
3							
4							
5							
6							
7							
8							
9							
10							
11							
12							
13							
14							
15							
16							
17							
18							
19							
20							
21							
22							
23							
24							
25							
Tonnage Total						24.15	

WEIGHMASTER:







126 J B C G 4 0 2004

**NORTH COAST  
LABORATORIES LTD**

December 15, 2004

SHN Consulting Engineers and Geologists  
812 West Wabash Avenue  
Eureka, CA 95501

Attn: Erik Nielsen

RE: 098076 Fernbridge Mkt.

Order No.: 0412367

Invoice No.: 46806

PO No.:

ELAP No. 1247-Expires July 2006

**SAMPLE IDENTIFICATION**

Fraction	Client Sample Description
01A	FM-SS-01
02A	FM-SS-02
03A	FM-SS-03
04A	FM-SS-04

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

**REPORT CERTIFIED BY**

Laboratory Supervisor(s)

QA Unit Manager

Jesse G. Chaney, Jr.  
Laboratory Director



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**North Coast Laboratories, Ltd.****Date:** 15-Dec-04

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**CLIENT:** SHN Consulting Engineers and Geologists  
**Project:** 098076 Fernbridge Mkt.  
**Lab Order:** 0412367**CASE NARRATIVE**

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**Gasoline Components/Additives:**

Sample FM-SS-02 appears to be similar to gasoline but certain peak ratios are not that of a fresh gasoline standard. The reported result represents the amount of material in the gasoline range.

Date: 15-Dec-04  
WorkOrder: 0412367

## ANALYTICAL REPORT

Client Sample ID: FM-SS-01  
Lab ID: 0412367-01A

Received: 12/14/04

Collected: 12/14/04 10:35

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/14/04	12/14/04
Benzene	0.21	0.0050	µg/g	1.0	12/14/04	12/14/04
Toluene	ND	0.0050	µg/g	1.0	12/14/04	12/14/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/14/04	12/14/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/14/04	12/14/04
o-Xylene	ND	0.0050	µg/g	1.0	12/14/04	12/14/04
Surrogate: 1,4-Dichlorobenzene-d4	95.5	80-120	% Rec	1.0	12/14/04	12/14/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/14/04	12/14/04

Client Sample ID: FM-SS-02  
Lab ID: 0412367-02A

Received: 12/14/04

Collected: 12/14/04 11:20

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/14/04	12/14/04
Benzene	0.038	0.0050	µg/g	1.0	12/14/04	12/14/04
Toluene	0.0083	0.0050	µg/g	1.0	12/14/04	12/14/04
Ethylbenzene	0.14	0.0050	µg/g	1.0	12/14/04	12/14/04
m,p-Xylene	0.17	0.010	µg/g	1.0	12/14/04	12/14/04
o-Xylene	0.0086	0.0050	µg/g	1.0	12/14/04	12/14/04
Surrogate: 1,4-Dichlorobenzene-d4	97.7	80-120	% Rec	1.0	12/14/04	12/14/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	10	1.0	µg/g	1.0	12/14/04	12/14/04

Date: 15-Dec-04

WorkOrder: 0412367

## ANALYTICAL REPORT

Client Sample ID: FM-SS-03

Received: 12/14/04

Collected: 12/14/04 11:30

Lab ID: 0412367-03A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/14/04	12/14/04
Benzene	0.11	0.0050	µg/g	1.0	12/14/04	12/14/04
Toluene	ND	0.0050	µg/g	1.0	12/14/04	12/14/04
Ethylbenzene	0.033	0.0050	µg/g	1.0	12/14/04	12/14/04
m,p-Xylene	0.040	0.010	µg/g	1.0	12/14/04	12/14/04
o-Xylene	ND	0.0050	µg/g	1.0	12/14/04	12/14/04
Surrogate: 1,4-Dichlorobenzene-d4	94.5	80-120	% Rec	1.0	12/14/04	12/14/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/14/04	12/14/04

Client Sample ID: FM-SS-04

Received: 12/14/04

Collected: 12/14/04 11:40

Lab ID: 0412367-04A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/14/04	12/14/04
Benzene	0.073	0.0050	µg/g	1.0	12/14/04	12/14/04
Toluene	ND	0.0050	µg/g	1.0	12/14/04	12/14/04
Ethylbenzene	0.022	0.0050	µg/g	1.0	12/14/04	12/14/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/14/04	12/14/04
o-Xylene	0.0052	0.0050	µg/g	1.0	12/14/04	12/14/04
Surrogate: 1,4-Dichlorobenzene-d4	93.1	80-120	% Rec	1.0	12/14/04	12/14/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/14/04	12/14/04

# North Coast Laboratories, Ltd.

Date: 15-Dec-04

CLIENT: SHN Consulting Engineers and Geologists

Work Order: 0412367

Project: 098076 Fernbridge Mkt.

## QC SUMMARY REPORT

Method Blank

Sample ID: MB-12652	Batch ID: 12652	Test Code: 82600XYS	Units: µg/g	Analysis Date: 12/14/04 8:05:00 AM	Prep Date: 12/14/04						
Client ID:	Run ID: ORGCMS3_041214A	SeqNo: 469941									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.025	0	0	0%	0	0	0			
Benzene	ND	0.0050	0	0	0%	0	0	0			
Toluene	ND	0.0050	0	0	0%	0	0	0			
Ethylbenzene	ND	0.0050	0	0	0%	0	0	0			
m,p-Xylene	ND	0.010	0	0	0%	0	0	0			
o-Xylene	ND	0.0050	0	0	0%	0	0	0			
1,4-Dichlorobenzene-d4	0.923	0.10	1.00	0	92.3%	80	120	0			

Sample ID: MB-12652	Batch ID: 12652	Test Code: GASS-MS	Units: µg/g	Analysis Date: 12/14/04 8:05:00 AM	Prep Date: 12/14/04						
Client ID:	Run ID: ORGCMS3_041214B	SeqNo: 469950									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PHC Gasoline	0.3117	1.0									

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank

# North Coast Laboratories, Ltd.

Date: 15-Dec-04

**CLIENT:** SHN Consulting Engineers and Geologists  
**Work Order:** 0412367  
**Project:** 098076 Fernbridge Mkt.

## QC SUMMARY REPORT

Laboratory Control Spike

Sample ID:	LCS-12652	Batch ID:	12652	Test Code:	82600XYS	Units:	µg/g	Analysis Date:	12/14/04 5:33:00 AM	Prep Date:	12/14/04
Client ID:		Run ID:	ORGCMS3_041214A	SeqNo:	469939						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.3899	0.025	0.400	0	97.5%	86	137	0			
Benzene	0.3828	0.0050	0.400	0	95.7%	74	137	0			
Toluene	0.3528	0.0050	0.400	0	88.2%	69	139	0			
Ethylbenzene	0.3837	0.0050	0.400	0	95.9%	77	139	0			
m,p-Xylene	0.7683	0.010	0.800	0	96.0%	74	147	0			
o-Xylene	0.3808	0.0050	0.400	0	95.2%	62	147	0			
1,4-Dichlorobenzene-d4	0.964	0.10	1.00	0	96.4%	80	120	0			

Sample ID:	LCS-12652	Batch ID:	12652	Test Code:	82600XYS	Units:	µg/g	Analysis Date:	12/14/04 5:58:00 AM	Prep Date:	12/14/04
Client ID:		Run ID:	ORGCMS3_041214A	SeqNo:	469940						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.3842	0.025	0.400	0	96.1%	86	137	0.390	1.46%	20	
Benzene	0.3849	0.0050	0.400	0	96.2%	74	137	0.383	0.544%	20	
Toluene	0.3518	0.0050	0.400	0	87.9%	69	139	0.353	0.300%	20	
Ethylbenzene	0.3841	0.0050	0.400	0	96.0%	77	139	0.384	0.111%	20	
m,p-Xylene	0.7639	0.010	0.800	0	95.5%	74	147	0.768	0.580%	20	
o-Xylene	0.3803	0.0050	0.400	0	95.1%	62	147	0.381	0.149%	20	
1,4-Dichlorobenzene-d4	0.960	0.10	1.00	0	95.9%	80	120	0.964	0.517%	15	

Sample ID:	LCSG-12652	Batch ID:	12652	Test Code:	GASS-MS	Units:	µg/g	Analysis Date:	12/14/04 6:49:00 AM	Prep Date:	12/14/04
Client ID:		Run ID:	ORGCMS3_041214B	SeqNo:	469948						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	22.44	1.0	20.0	0	112%	77	124	0			

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank

**CLIENT:** SHN Consulting Engineers and Geologists

**Work Order:** 0412367

**Project:** 098076 Fembridge Mkt.

**QC SUMMARY REPORT**

Laboratory Control Spike Duplicate

Sample ID: LCSDG-12652	Batch ID: 12652	Test Code: GASS-MS	Units: µg/g	Analysis Date: 12/14/04 7:14:00 AM		Prep Date: 12/14/04					
Client ID:		Run ID: ORGCM3_041214B		SeqNo: 469949							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	22.55	1.0	20.0	0	113%	77	124	22.4	0.506%	20	

<b>Qualifiers:</b>	ND - Not Detected at the Reporting Limit	S - Spike Recovery outside accepted recovery limits	B - Analyte detected in the associated Method Blank
	J - Analyte detected below quantitation limits	R - RPD outside accepted recovery limits	



## Chain of Custody

LABORATORY NUMBER: 04123617

**PROJECT INFORMATION**

ject Number: 098076

ject Name: Fairbridge Mkt.

chase Order Number:

[illegible]

**CONTAINER CODES:** 1—1/2 gal. pl; 2—250 ml pl;  
3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG;  
6—500 ml BG; 7—1 L BG; 8—1 L cg; 9—40 ml VOA;  
10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar;  
13—brass tube; 14—other

**PRESERVATIVE CODES:** a—HNO<sub>3</sub>; b—HCl; c—H<sub>2</sub>SO<sub>4</sub>; d—Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>; e—NaOH; f—C<sub>2</sub>H<sub>5</sub>O<sub>2</sub>Cl; g—other

### SAMPLE CONDITION/SPECIAL INSTRUCTIONS

G3 may be warm

Evidence of Category - Example - Conf =

### **SAMPLE DISPOSAL**

☒ NCL Disposal of Non-Contaminated☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA

SHIPPED VIA: UPS Air-Ex Fed-Ex Bus Hand

**ABBREVIATIONS:** DW=Drinking Water; Eff=Effluent; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.





820'D DEC 17 2004

**NORTH COAST  
LABORATORIES LTI**

December 16, 2004

SHN Consulting Engineers and Geologists  
812 West Wabash Avenue  
Eureka, CA 95501

Attn: Erik Nielsen

RE: 098076 Fernbridge Mkt.

Order No.: 0412414

Invoice No.: 46812

PO No.:

ELAP No. 1247-Expires July 2006

**SAMPLE IDENTIFICATION**

Fraction	Client Sample Description
01A	FM-SS-05
02A	FM-SS-06
03A	FM-SS-07
04A	FM-SS-08

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

**REPORT CERTIFIED BY**

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.  
Laboratory Director

**North Coast Laboratories, Ltd.****Date:** 16-Dec-04

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**CLIENT:** SHN Consulting Engineers and Geologists  
**Project:** 098076 Fernbridge Mkt.  
**Lab Order:** 0412414

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**CASE NARRATIVE****Gasoline Components/Additives:**

The gasoline values for samples FM-SS-06 and FM-SS-08 include the reported gasoline components in addition to other peaks in the gasoline range.

Date: 16-Dec-04  
WorkOrder: 0412414

## ANALYTICAL REPORT

Client Sample ID: FM-SS-05  
Lab ID: 0412414-01A

Received: 12/15/04

Collected: 12/14/04 14:00

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/15/04	12/15/04
Benzene	0.14	0.0050	µg/g	1.0	12/15/04	12/15/04
Toluene	ND	0.0050	µg/g	1.0	12/15/04	12/15/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/15/04	12/15/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/15/04	12/15/04
o-Xylene	ND	0.0050	µg/g	1.0	12/15/04	12/15/04
Surrogate: 1,4-Dichlorobenzene-d4	95.2	80-120	% Rec	1.0	12/15/04	12/15/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/15/04	12/15/04

Client Sample ID: FM-SS-06  
Lab ID: 0412414-02A

Received: 12/15/04

Collected: 12/15/04 8:50

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/15/04	12/16/04
Benzene	0.24	0.0050	µg/g	1.0	12/15/04	12/16/04
Toluene	0.60	0.0050	µg/g	1.0	12/15/04	12/16/04
Ethylbenzene	0.54	0.0050	µg/g	1.0	12/15/04	12/16/04
m,p-Xylene	1.1	0.010	µg/g	1.0	12/15/04	12/16/04
o-Xylene	0.75	0.0050	µg/g	1.0	12/15/04	12/16/04
Surrogate: 1,4-Dichlorobenzene-d4	95.9	80-120	% Rec	1.0	12/15/04	12/16/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	43	1.0	µg/g	1.0	12/15/04	12/16/04

Date: 16-Dec-04

WorkOrder: 0412414

## ANALYTICAL REPORT

Client Sample ID: FM-SS-07

Received: 12/15/04

Collected: 12/15/04 9:00

Lab ID: 0412414-03A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/15/04	12/15/04
Benzene	ND	0.0050	µg/g	1.0	12/15/04	12/15/04
Toluene	ND	0.0050	µg/g	1.0	12/15/04	12/15/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/15/04	12/15/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/15/04	12/15/04
o-Xylene	ND	0.0050	µg/g	1.0	12/15/04	12/15/04
Surrogate: 1,4-Dichlorobenzene-d4	96.0	80-120	% Rec	1.0	12/15/04	12/15/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/15/04	12/15/04

Client Sample ID: FM-SS-08

Received: 12/15/04

Collected: 12/15/04 10:30

Lab ID: 0412414-04A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/15/04	12/15/04
Benzene	0.43	0.0050	µg/g	1.0	12/15/04	12/15/04
Toluene	0.016	0.0050	µg/g	1.0	12/15/04	12/15/04
Ethylbenzene	0.047	0.0050	µg/g	1.0	12/15/04	12/15/04
m,p-Xylene	0.041	0.010	µg/g	1.0	12/15/04	12/15/04
o-Xylene	0.011	0.0050	µg/g	1.0	12/15/04	12/15/04
Surrogate: 1,4-Dichlorobenzene-d4	96.4	80-120	% Rec	1.0	12/15/04	12/15/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	2.2	1.0	µg/g	1.0	12/15/04	12/15/04

# North Coast Laboratories, Ltd.

Date: 16-Dec-04

CLIENT: SHN Consulting Engineers and Geologists

Work Order: 0412414

Project: 098076 Fernbridge Mkt.

## QC SUMMARY REPORT

Method Blank

Sample ID	MB-12662	Batch ID: 12662	Test Code: 82600XYS	Units: µg/g	Analysis Date	12/15/04 8:01:00 AM	Prep Date	12/15/04
Client ID:		Run ID: ORGCMS3_041215A			SeqNo:	470218		
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val
Methyl tert-butyl ether (MTBE)	ND	0.025						
Benzene	ND	0.0050						
Toluene	ND	0.0050						
Ethylbenzene	ND	0.0050						
m,p-Xylene	0.003216	0.010						
o-Xylene	ND	0.0050						
1,4-Dichlorobenzene-d4	0.950	0.10	1.00	0	95.0%	80	120	0
								J

Sample ID	MB-12662	Batch ID: 12662	Test Code: GASS-MS	Units: µg/g	Analysis Date	12/15/04 8:01:00 AM	Prep Date	12/15/04
Client ID:		Run ID: ORGCMS3_041215B			SeqNo:	470263		
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val
TPHC Gasoline	0.3866	1.0						
								J

### Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank

# North Coast Laboratories, Ltd.

Date: 16-Dec-04

CLIENT: SHN Consulting Engineers and Geologists

Work Order: 0412414

Project: 098076 Fembridge Mkt.

## QC SUMMARY REPORT

Laboratory Control Spike

Sample ID	LCS-12662	Batch ID: 12662	Test Code: 82600XYS	Units: µg/g	Analysis Date	12/15/04 5:28:00 AM	Prep Date	12/15/04			
Client ID:		Run ID: ORGCM33_041215A			SeqNo: 470216						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.3627	0.025	0.400	0	90.7%	86	137	0			
Benzene	0.3745	0.0050	0.400	0	93.6%	74	137	0			
Toluene	0.3496	0.0050	0.400	0	87.4%	69	139	0			
Ethylbenzene	0.3796	0.0050	0.400	0	94.9%	77	139	0			
m,p-Xylene	0.7640	0.010	0.800	0	95.5%	74	147	0			
o-Xylene	0.3700	0.0050	0.400	0	92.5%	62	147	0			
1,4-Dichlorobenzene-d4	0.984	0.10	1.00	0	98.4%	80	120	0			

Sample ID	LCSD-12662	Batch ID: 12662	Test Code: 82600XYS	Units: µg/g	Analysis Date	12/15/04 5:54:00 AM	Prep Date	12/15/04			
Client ID:		Run ID: ORGCM33_041215A			SeqNo:	470217					
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.3786	0.025	0.400	0	94.7%	86	137	0.363	4.28%	20	
Benzene	0.3925	0.0050	0.400	0	98.1%	74	137	0.374	4.88%	20	
Toluene	0.3716	0.0050	0.400	0	92.9%	69	139	0.350	6.09%	20	
Ethylbenzene	0.3969	0.0050	0.400	0	99.2%	77	139	0.380	4.45%	20	
m,p-Xylene	0.8019	0.010	0.800	0	100%	74	147	0.764	4.84%	20	
o-Xylene	0.3948	0.0050	0.400	0	98.7%	62	147	0.370	6.49%	20	
4-Dichlorobenzene-d4	0.985	0.10	1.00	0	98.5%	80	120	0.984	0.153%	15	

Sample ID	LCSG-12662	Batch ID: 12662	Test Code: GASS-MS	Units: µg/g	Analysis Date	12/15/04 6:44:00 AM	Prep Date	12/15/04			
Client ID:		Run ID: ORGCM33_041215B			SeqNo: 470261						
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
PHC Gasoline	22.39	1.0	20.0	0	112%	77	124	0			

Qualifiers: ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank

**CLIENT:** SHN Consulting Engineers and Geologists

**Work Order:** 0412414

**Project:** 098076 Fembridge Mkt.

**QC SUMMARY REPORT**

Laboratory Control Spike Duplicate

Sample ID	LCSDG-12662	Batch ID:	12662	Test Code:	GASS-MS	Units:	µg/g	Analysis Date	12/15/04 7:10:00 AM	Prep Date	12/15/04		
Client ID:		Run ID:	ORGCMS3_041215B					SeqNo:	470262				
Analyte		Result		Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline		22.32		1.0	20.0	0	112%	77	124	22.4	0.338%	20	

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank





5680 West End Road • Arcata • CA 95521-9202  
707-822-4649 fax 707-822-6831

## Chain of Custody

P. ✓ of ✓

LABORATORY NUMBER:

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5-7 Day  
☐ STD (2-3 wk) ☐ Other;

PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐

Preliminary: FAX ☒ Verbal ☐ By:        /        /       

Final Report: FAX ☐ Verbal ☐ By:        /        /       

**CONTAINER CODES:** 1— $\frac{1}{2}$  gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L g; 9—40 ml VOA; 10—125 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

**PRESERVATIVE CODES:** a—HNO<sub>3</sub>; b—HCl; c—H<sub>2</sub>SO<sub>4</sub>; d—Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>; e—NaOH; f—C<sub>2</sub>H<sub>5</sub>O<sub>2</sub>Cl; g—other

### SAMPLE CONDITION/SPECIAL INSTRUCTIONS

### SAMPLE DISPOSAL

☒ NCL Disposal of Non-Contaminated  
☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA

SHIPPED VIA:	UPS	Air-Ex	Fed-Ex	Bus	Hand
--------------	-----	--------	--------	-----	------

**TRIX:** DW=Drinking Water; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

[illegible]

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
<i>Elizabeth N. [Signature]</i>	12-15-08 12:15 PM	<i>Amanda [Signature]</i>	12-15-08 12:10

Attention: Erik Nielson  
 Salts & Invoice to: SHN  
 Address: 812 West Wabash Avenue  
 Eureka, CA 95501  
 Phone: 441-8855  
 Copies of Report to:  
 Computer (Sign & Print): Erik Nielson

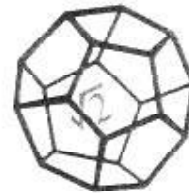
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### PROJECT INFORMATION

Project Number: 098076  
 Project Name: Ferrybridge MK4  
 Purchase Order Number:

ID	SAMPLE ID	DATE	TIME	MATRIX*
	FM-SS-05	12-14-04	1100	S
	FM-SS-06	12-15-04	850	L
	FM-SS-07	L	900	L
	FM-SS-08		1030	

REC'D JAN 05 2005



NORTH COAST  
LABORATORIES LTD

January 03, 2005

SHN Consulting Engineers and Geologists  
812 West Wabash Avenue  
Eureka, CA 95501

Attn: Erik Nielsen

RE: 098076, Fernbridge Mkt

Order No.: 0412467

Invoice No.: 47204

PO No.:

ELAP No. 1247-Expires July 2006

**SAMPLE IDENTIFICATION**

Fraction Client Sample Description

01A	FM-SS-09
02A	FM-SS-10
03A	FM-SS-11
04A	FM-SS-12
05A	FM-SS-13
06A	FM-SS-14
07A	FM-SS-15
08A	FM-SS-16
09A	FM-SS-17

ND = Not Detected at the Reporting Limit

Limit = Reporting Limit

All solid results are expressed on a wet-weight basis unless otherwise noted.

**REPORT CERTIFIED BY**

Laboratory Supervisor(s)

QA Unit

Jesse G. Chaney, Jr.  
Laboratory Director

Date: 03-Jan-05

WorkOrder: 0412467

## ANALYTICAL REPORT

Client Sample ID: FM-SS-09

Received: 12/16/04

Collected: 12/15/04 13:10

Lab ID: 0412467-01A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/21/04	12/22/04
Benzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Toluene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/21/04	12/22/04
o-Xylene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Surrogate: 1,4-Dichlorobenzene-d4	89.6	80-120	% Rec	1.0	12/21/04	12/22/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/21/04	12/22/04

Client Sample ID: FM-SS-10

Received: 12/16/04

Collected: 12/15/04 13:20

Lab ID: 0412467-02A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/21/04	12/22/04
Benzene	0.011	0.0050	µg/g	1.0	12/21/04	12/22/04
Toluene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/21/04	12/22/04
o-Xylene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Surrogate: 1,4-Dichlorobenzene-d4	90.1	80-120	% Rec	1.0	12/21/04	12/22/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/21/04	12/22/04

Date: 03-Jan-05

WorkOrder: 0412467

## ANALYTICAL REPORT

Client Sample ID: FM-SS-11

Received: 12/16/04

Collected: 12/15/04 13:30

Lab ID: 0412467-03A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/21/04	12/22/04
Benzene	0.0055	0.0050	µg/g	1.0	12/21/04	12/22/04
Toluene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/21/04	12/22/04
o-Xylene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Surrogate: 1,4-Dichlorobenzene-d4	90.2	80-120	% Rec	1.0	12/21/04	12/22/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/21/04	12/22/04

Client Sample ID: FM-SS-12

Received: 12/16/04

Collected: 12/15/04 14:05

Lab ID: 0412467-04A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/21/04	12/22/04
Benzene	0.021	0.0050	µg/g	1.0	12/21/04	12/22/04
Toluene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Ethylbenzene	0.0073	0.0050	µg/g	1.0	12/21/04	12/22/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/21/04	12/22/04
o-Xylene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Surrogate: 1,4-Dichlorobenzene-d4	90.9	80-120	% Rec	1.0	12/21/04	12/22/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/21/04	12/22/04

Date: 03-Jan-05

WorkOrder: 0412467

## ANALYTICAL REPORT

Client Sample ID: FM-SS-13

Received: 12/16/04

Collected: 12/15/04 14:15

Lab ID: 0412467-05A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/21/04	12/22/04
Benzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Toluene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/21/04	12/22/04
o-Xylene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Surrogate: 1,4-Dichlorobenzene-d4	90.0	80-120	% Rec	1.0	12/21/04	12/22/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/21/04	12/22/04

Client Sample ID: FM-SS-14

Received: 12/16/04

Collected: 12/15/04 14:25

Lab ID: 0412467-06A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/21/04	12/22/04
Benzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Toluene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/21/04	12/22/04
o-Xylene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Surrogate: 1,4-Dichlorobenzene-d4	91.2	80-120	% Rec	1.0	12/21/04	12/22/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/21/04	12/22/04

Date: 03-Jan-05  
WorkOrder: 0412467

## ANALYTICAL REPORT

Client Sample ID: FM-SS-15  
Lab ID: 0412467-07A

Received: 12/16/04

Collected: 12/15/04 15:00

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/21/04	12/22/04
Benzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Toluene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/21/04	12/22/04
o-Xylene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Surrogate: 1,4-Dichlorobenzene-d4	91.8	80-120	% Rec	1.0	12/21/04	12/22/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/21/04	12/22/04

Client Sample ID: FM-SS-16  
Lab ID: 0412467-08A

Received: 12/16/04

Collected: 12/15/04 15:10

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/21/04	12/22/04
Benzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Toluene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/21/04	12/22/04
o-Xylene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Surrogate: 1,4-Dichlorobenzene-d4	91.2	80-120	% Rec	1.0	12/21/04	12/22/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/21/04	12/22/04

Date: 03-Jan-05

WorkOrder: 0412467

## ANALYTICAL REPORT

Client Sample ID: FM-SS-17

Received: 12/16/04

Collected: 12/16/04 8:15

Lab ID: 0412467-09A

Test Name: Gasoline Components/Additives

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
Methyl tert-butyl ether (MTBE)	ND	0.025	µg/g	1.0	12/21/04	12/22/04
Benzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Toluene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Ethylbenzene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
m,p-Xylene	ND	0.010	µg/g	1.0	12/21/04	12/22/04
o-Xylene	ND	0.0050	µg/g	1.0	12/21/04	12/22/04
Surrogate: 1,4-Dichlorobenzene-d4	92.2	80-120	% Rec	1.0	12/21/04	12/22/04

Test Name: TPH as Gasoline

Reference: LUFT/EPA 8260B Modified

<u>Parameter</u>	<u>Result</u>	<u>Limit</u>	<u>Units</u>	<u>DF</u>	<u>Extracted</u>	<u>Analyzed</u>
TPHC Gasoline	ND	1.0	µg/g	1.0	12/21/04	12/22/04



# North Coast Laboratories, Ltd.

Date: 03-Jan-05

**CLIENT:** SHN Consulting Engineers and Geologists  
**Work Order:** 0412467  
**Project:** 098076, Farnbridge Mkt

## QC SUMMARY REPORT

Method Blank

Sample ID: MB-12696	Batch ID: 12696	Test Code: 82600XYS	Units: µg/g	Analysis Date: 12/22/04 9:25:00 AM	Prep Date: 12/21/04						
Client ID:	Run ID: ORGCMS3_041221A	SeqNo: 472152									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	ND	0.025									
Benzene	ND	0.0050									
Toluene	ND	0.0050									
Ethylbenzene	ND	0.0050									
m,p-Xylene	0.005723	0.010									J
o-Xylene	0.004450	0.0050									J
1,4-Dichlorobenzene-d4	0.911	0.10	1.00	0	91.1%	80	120	0			

Sample ID: MB-12696	Batch ID: 12696	Test Code: GASS-MS	Units: µg/g	Analysis Date: 12/22/04 9:25:00 AM	Prep Date: 12/21/04						
Client ID:	Run ID: ORGCMS3_041221B	SeqNo: 472167									
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	0.4158	1.0									J

**Qualifiers:** ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits  
S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits  
B - Analyte detected in the associated Method Blank

# North Coast Laboratories, Ltd.

Date: 03-Jan-05

CLIENT: SHN Consulting Engineers and Geologists

Work Order: 0412467

Project: 098076, Fernbridge Mkt

## QC SUMMARY REPORT

Laboratory Control Spike

Sample ID: LCS-12696	Batch ID: 12696	Test Code: 8260OXS	Units: µg/g	Analysis Date: 12/21/04 3:28:00 AM	Prop Date: 12/21/04						
Client ID:		Run ID: ORGCMS3_041221A		SeqNo: 472149							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.3952	0.025	0.400	0	98.8%	86	137	0			
Benzene	0.3771	0.0050	0.400	0	94.3%	74	137	0			
Toluene	0.3611	0.0050	0.400	0	90.3%	69	139	0			
Ethylbenzene	0.4096	0.0050	0.400	0	102%	77	139	0			
m,p-Xylene	0.8116	0.010	0.800	0	101%	74	147	0			
o-Xylene	0.4217	0.0050	0.400	0	105%	52	147	0			
1,4-Dichlorobenzene-d4	0.920	0.10	1.00	0	92.0%	80	120	0			

Sample ID: LCSD-12696	Batch ID: 12696	Test Code: 8260OXS	Units: µg/g	Analysis Date: 12/21/04 3:53:00 AM	Prep Date: 12/21/04						
Client ID:		Run ID: ORGCMS3_041221A		SeqNo: 472150							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Methyl tert-butyl ether (MTBE)	0.3913	0.025	0.400	0	97.8%	86	137	0.395	0.980%	20	
Benzene	0.3772	0.0050	0.400	0	94.3%	74	137	0.377	0.0321%	20	
Toluene	0.3627	0.0050	0.400	0	90.7%	69	139	0.361	0.457%	20	
Ethylbenzene	0.4139	0.0050	0.400	0	103%	77	139	0.410	1.04%	20	
m,p-Xylene	0.8175	0.010	0.800	0	102%	74	147	0.812	0.726%	20	
o-Xylene	0.4271	0.0050	0.400	0	107%	62	147	0.422	1.27%	20	
1,4-Dichlorobenzene-d4	0.927	0.10	1.00	0	92.7%	80	120	0.920	0.757%	15	

Sample ID: LCSG-12696	Batch ID: 12696	Test Code: GASS-MS	Units: µg/g	Analysis Date: 12/21/04 5:09:00 AM	Prep Date: 12/21/04						
Client ID:		Run ID: ORGCMS3_041221B		SeqNo: 472164							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	23.27	1.0	20.0	0	116%	77	124	0			

**Qualifiers:** ND - Not Detected at the Reporting Limit  
 J - Analyte detected below quantitation limits  
 S - Spike Recovery outside accepted recovery limits  
 R - RPD outside accepted recovery limits  
 B - Analyte detected in the associated Method Blank

**CLIENT:** SHN Consulting Engineers and Geologists  
**Work Order:** 0412467  
**Project:** 098076, Fembridge Mkt

**QC SUMMARY REPORT**  
Laboratory Control Spike Duplicate

Sample ID: LCSDG-12696	Batch ID: 12696	Test Code: GASS-MS	Units: µg/g	Analysis Date: 12/21/04 5:35:00 AM	Prep Date: 12/21/04						
Client ID:		Run ID: ORGCMS3_041221B		SeqNo: 472165							
Analyte	Result	Limit	SPK value	SPK Ref Val	% Rec	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
TPHC Gasoline	21.18	1.0	20.0	0	105%	77	124	23.3	9.43%	20	

**Qualifiers:**
ND - Not Detected at the Reporting Limit  
J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits  
R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank



5680 West End Road • Arcata • CA 95521-9202  
707-822-4649 Fax 707-822-6831

## of

0412167

LABORATORY NUMBER:

TAT: ☐ 24 Hr ☐ 48 Hr ☐ 5 Day ☐ 5-7 Day  
☒ STD (2-3 Wk) ☐ Other:

PRIOR AUTHORIZATION IS REQUIRED FOR RUSHES

REPORTING REQUIREMENTS: State Forms ☐Preliminary: FAX ☐ Verbal ☐ By: / /Final Report: FAX ☐ Verbal ☐ By: / /

**CONTAINER CODES:** 1—1/2 gal. pl; 2—250 ml pl; 3—500 ml pl; 4—1 L Nalgene; 5—250 ml BG; 6—500 ml BG; 7—1 L BG; 8—1 L cgr; 9—40 ml VOA; 10—1.25 ml VOA; 11—4 oz glass jar; 12—8 oz glass jar; 13—brass tube; 14—other

**PRESERVATIVE CODES:** a—HNO<sub>3</sub>; b—HCl; c—H<sub>2</sub>SO<sub>4</sub>; d—Na<sub>2</sub>S<sub>2</sub>O<sub>3</sub>; e—NaOH; f—C<sub>2</sub>H<sub>5</sub>O<sub>2</sub>Cl; g—other

### **SAMPLE CONDITION/SPECIAL INSTRUCTIONS**

Carbox Temp =  $5.5^{\circ}\text{C}$

#17 is not

## SAMPLE DISPOSAL

☐ NCL Disposal of Non-Contaminated☐ Return ☐ Pickup

CHAIN OF CUSTODY SEALS Y/N/NA

SHIPPED VIA:	UPS	Air-Ex	Fed-Ex	Bus	Hand
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**ATRIX:** DW=Drinking Water; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.

[illegible]

ention: 53K Vista  
 ults & Invoice to: SHN  
 dress: 812 West Wabash Avenue  
Eureka, CA 95501  
 one: 441-8855  
 pies of Report to: \_\_\_\_\_  
 mpler (Sign & Print): 53K Vista

## PROJECT INFORMATION

Project Number: 098076  
Project Name: Fenbridge Mkt  
Purchase Order Number:

ID	SAMPLE ID	DATE	TIME	MATRIX*
	FM-SS-09	12/15/04	1310	S
	FM-SS-10		1320	
	FM-SS-11		1330	
	FM-SS-12		1405	
	FM-SS-13		1415	
	FM-SS-14		1425	
	FM-SS-15		1500	
	FM-SS-16		1510	
	FM-SS-17	12/16/04	0815	T

RELINQUISHED BY (Sign & Print)	DATE/TIME	RECEIVED BY (Sign)	DATE/TIME
<i>E. L. Miller / E. L. Miller</i>	11/14/04	<i>[Signature]</i>	11/15/04

**ATRIX:** DW=Drinking Water; Inf=Influent; SW=Surface Water; GW=Ground Water; S=Soil; O=Other.